## UNITED STATES PATENT AND TRADEMARK OFFICE

# **CERTIFICATE OF CORRECTION**

PATENT NO. : 7,048,723 B1 Page 1 of 1

APPLICATION NO.: 09/787498
DATED: May 23, 2006
INVENTOR(S): Frazier et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

#### Title page item (57)

Abstract, line 12, change "on" to --one--

#### Column 7

Line 24, after "The" insert --needle array device 74 can then be disposed in a machined interface structure 76 such as--

## Column 8

Line 28, before "to have", remove [to have]

Line 36, change "one dimensional" to --one-dimensional--

## Column 9

Equation (2), line 25, change "  $\frac{\partial^2 V}{\partial x^2} \cdot \frac{\partial^2 V}{\partial y^2} - \frac{1}{\mu} \nabla p = 0$ " to

$$-\frac{\partial^2 V}{\partial x^2} + \frac{\partial^2 V}{\partial y^2} - \frac{1}{\mu} \nabla p = 0$$

#### Column 10

Line 28, change ", while" to --. While--

Signed and Sealed this

Twenty-fourth Day of November, 2009

David J. Kappos Director of the United States Patent and Trademark Office

Varid J. Kappos